

Desidiosa, then, differs from *obrussa* (*desidiosa* of authors) in its generally larger and more solid shell, longer and more turreted spire, more pronounced and heavier sculpture and more convex whorls, with deeper sutures; in having an internal rib inside the outer lip and in the presence of a fold on the columella. Compared with *palustris*, *desidiosa* is smaller, usually more solid and with a more obese body whorl and a more dilated aperture. The spire, too, is more sharply conic and the whorls are more tightly coiled, producing a deeper suture. The inner lip is also more expanded, producing a heavier callus. The shells called *elodes* by Say are larger, more flat-sided, with a longer spire, and the whorls are not so rounded and are more oblique.

If we accept the evidence afforded by Say's specimens (and there seems to the writer to be no other course), then the shells usually called *desidiosa* must bear the name of *obrussa*, which is the first available name, and *desidiosa* must be used for the shells so-called by Say.

EXPLANATION OF PLATE III.¹

Fig. 1. *Lymnæa desidiosa* Say, Williamsville, Erie Co., N. Y. (from collection of Miss Mary Walker, Buffalo, N. Y.)

Fig. 2. Say's figures of *Lymnæa desidiosa* in Amer. Conch., pl. 55, fig. 3.

NORTHERN OPISTHOBRANCHIATA.

BY F. M. MACFARLAND.

NORTHERN AND ARCTIC INVERTEBRATES IN THE COLLECTION OF THE SWEDISH STATE MUSEUM (RIKSMUSEUM). III. OPISTHOBRANCHIA AND PTEROPODA. By Nils Odhner (Kungl. Svenska Vetenskaps Akademiens Handlingar, Band 41, No. 4, pp. 1-118, pl. I-III, 1907).

The above work will be welcomed by American zoölogists as a valuable contribution to our knowledge not only of the Opisthobranch fauna of Scandinavian waters, but also as of great convenience in studying the quite similar fauna of our own North Atlantic shores. The classic *Index Molluscorum Scandinaviæ* of Lovén, 1846, and the *Mollusca Regionis Norvegiæ* of Sars, 1878, have been for

¹ Plate III will appear in the July number.

many years the principal extended sources of information upon this subject. The paper of Mr. Odhner is based upon the large collection of Northern and Arctic forms which the Swedish State Museum has accumulated from various expeditions and other sources since its foundation, and which have been studied in part only by scientists. The geographical area represented is a wide one, nearly completely circumpolar in its extent. It includes principally the Arctic Ocean off Siberia, the Kara and White Seas, the Arctic and Atlantic Oceans off the coast of Norway, the waters surrounding the whole Scandinavian peninsula, and to a less extent the coasts of Spitzbergen, Iceland and Greenland, the North Atlantic, Davis Strait, Baffin Bay and Bering Sea.

The first section of the paper gives a useful systematic synopsis of the Opisthobranchs and Pteropods studied, based largely upon the well-known works of Fischer, Bergh and Pelsener. Following this is a detailed summary of the geographical and bathymetrical distribution.

The third section of the work is devoted to a description of the new forms found in the collection. These are *Diaphana hyalina* Turton var. *spirata*, *Diaphana glacialis*, *Goniæolis lobata*, *Archidoris nobilis* Lovén MS., *Issa villosa*, *Doridunculus pentabranchus*, *Idalia pulchella* A. & H. var. *fusca*, and *Cumanotus laticeps*, the last named being the type of a new genus of Aeolidiadae.

Of especial interest and value to students of this group of Mollusca are the three excellent plates, the second and third being especially welcome. These two present artistic reproductions in the natural colors of sixty-one figures of forty-one different species, prepared under the direction of Professor Lovén by the artists W. and F. v. Wright, but never yet published. These form a valuable supplement to Lovén's Index, the original numbers assigned by him being given in parentheses upon the plates. Those who have studied these beautiful animals in life and compared them with even the very best museum specimens, in which original color and body form have alike disappeared, will fully appreciate this preservation in a permanent manner of these important records.

The usefulness of the paper is further enhanced by a chronological bibliography and a very complete index. The convenience of the former might have been increased somewhat by the addition of abbreviated titles of all the papers cited, which are omitted in most cases, the date, author, journal and place alone being given.